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COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

LEGAL SUBCOMMITTEE

Thirty-fourth session

# SUMMARY RECORD OF THE 582nd MEETING

Held at the Vienna International Centre, Vienna,
on Wednesday, 29 March 1995, at 10 a.m.

**Chairman:** Mr. MIKULKA (Czech Republic)

CONTENTS

General exchange of views (*continued*)

Matters relating to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union (*continued*)

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*The meeting was called to order at 10.20 a.m.*

**GENERAL EXCHANGE OF VIEWS** (*continued*)

1. **Mr. CURIA** (Argentina) said that Argentina was no longer a sponsor of the working paper on principles regarding international cooperation in the exploration and utilization of outer space for peaceful purposes, and its name therefore did not appear on document A/AC.105/C.2/L.182/Rev.2. The Subcommittee could nevertheless be assured of Argentina's continued and constructive contribution to the discussion of that item both in the plenary and in the Working Group on the Benefits of Outer Space. The new working paper submitted by Germany and France (A/AC.105/C.2/L.197) was welcome.

2. Argentina attached great importance to the informal consultations on working methods, and hoped that the Subcommittee would make an exhaustive and imaginative analysis of its functions and working methods so as to optimize the results of its work. In that connection, it endorsed Australia's suggestion that more time be allocated to the consultations on working methods. A flexible working system would enable two extra half-days to be allocated to the discussions in addition to what was provided for in the schedule (A/AC.105/C.2/L.196).

3. The Symposium on Technical and Policy Issues Related to the Use of the Space Environment had been useful and had shed light on a number of aspects of the subject of space debris.

4. **Mr. BOJILOV** (Bulgaria) said that there was no need to allocate time to agenda item 3 on nuclear power sources at the present session, in the light of operative paragraph 5 of General Assembly resolution 49/34. The Scientific and Technical Subcommittee had agreed that a revision of the principles was not warranted at the present time, although it had recommended that the item should be retained on the agenda for the next session. The item could be retained on the agenda of the Legal Subcommittee as well.

5. With regard to agenda item 4 on the definition of outer space, the problem was to find ways of overcoming obstacles which had proved insurmountable for over a quarter of a century.

6. Regarding agenda item 5 on outer space benefits, the Bulgarian delegation looked forward to continuing the constructive debate which had taken place at the thirty-third session. The significant changes in the international political situation in recent years called for innovative approaches to global problems to ensure that all countries benefited from space technology and its applications.

7. With regard to the consultations called for by paragraph 8 of General Assembly resolution 49/34, the Bulgarian delegation believed that special attention should be paid to paragraph 3 in the list of proposals in the annex to the report of the Committee on the Peaceful Uses of Outer Space (A/49/20).

8. Several international legal instruments had been concluded as a result of the efforts of the Legal Subcommittee: one treaty and one agreement in the 1960s, two conventions and an agreement in the 1970s and two sets of principles in the 1980s. Recently, however, the pace of work had slowed down. The Legal Subcommittee's task was to develop international space law based on consensus. As space technologies continued to advance, the Subcommittee should intensify its efforts to promote international cooperation by developing legal principles and norms for the benefit and in the interests of all States.

9. **Mr. GONZALEZ** (Chile) expressed concern at the inactivity of the Subcommittee. It gave the impression that there were no topics of legal interest for consideration, whereas in fact the issues concerning the geostationary orbit and the benefits of space technology were of great technical and legal interest. There were other important items, too, which should be included on the agenda of future sessions.

10. Chile supported a flexible approach to the use of time. The question of working methods should be taken up by the Subcommittee so that time could be put to optimum use. However, that should not distract attention from the important substantive work of legal regulation.

11. With regard to agenda item 4 on the definition of outer space and the geostationary orbit, the contributions made at recent sessions by the Russian Federation and Colombia should serve as a basis for further discussion, since they contained new elements that might meet the aspirations of all parties. A resource such as the orbit, with its impact on telecommunications, could not be subject to technical regulation alone. The transmission of information was particularly relevant in education, which was crucial to economic and social development and to the improvement of living conditions.

12. The time allotted to the question of nuclear power sources would better be used for the consideration of a new legal topic.

13. With regard to agenda item 5 on outer space benefits, the revised version in document A/AC.105/C.2/L.182/Rev.2 of the working paper which had been used as a basis for discussion in previous years, and of which Chile was a sponsor, contained new ideas which should enable progress to be made.

14. The working paper submitted by Germany and France (A/AC.105/C.2/L.197) contained certain new elements such as the reference to international law and the Charter of the United Nations, giving international cooperation a more solid basis. It was a positive contribution and a step in the right direction.

15. There was general agreement that cooperation provided benefits for all and promoted stability. Cooperation in space activities could enhance security, and the use of satellites in the implementation of preventive diplomacy could contribute to the consolidation of peace.

16. **Mr. Ho-Jin LEE** (Republic of Korea) said that a new regime should be developed for aerospace objects taking account of the new international political environment and rapid advances in space technology. In that connection, the completion by member States of the questionnaire that had been drawn up would provide a good basis for further discussion.

17. The Committee on the Peaceful Uses of Outer Space and its Legal Subcommittee could discuss various aspects of the question of equitable access to and use of the geostationary orbit, complementing but not duplicating the work of ITU.

18. The geostationary orbit was a limited natural resource, and his delegation supported the idea of establishing legal principles to ensure adequate and equitable access to it for all States.

19. As far as space benefits were concerned, his delegation was prepared to put forward ideas on new initiatives to expand international cooperation in space activities.

20. Discussions on the principles of international cooperation in the exploration and utilization of outer space for peaceful purposes should proceed without delay. Document A/AC.105/C.2/L.182/Rev.2, on which his delegation would comment in the Working Group on the Benefits of Outer Space, would be a good starting-point for progress on that matter.

21. On the use of nuclear power sources in outer space, his delegation agreed that any revision of the relevant principles should await the results of scientific and technical debate on the matter.

22. Lastly, it would be desirable to improve the Subcommittee's working methods by following the example of other United Nations bodies.

**MATTERS RELATING TO THE DEFINITION AND DELIMITATION OF OUTER SPACE AND TO THE CHARACTER AND UTILIZATION OF THE GEOSTATIONARY ORBIT, INCLUDING CONSIDERATION OF WAYS AND MEANS TO ENSURE THE RATIONAL AND EQUITABLE USE OF THE GEOSTATIONARY ORBIT WITHOUT PREJUDICE TO THE ROLE OF THE INTERNATIONAL TELECOMMUNICATION UNION** (*continued*) (A/AC.105/573 and A/AC.105/605; A/49/20)

23. **Ms. VENTURINI** (Italy) said that some delegations considered that a conventionally defined boundary between airspace and outer space was needed, while others maintained that such a delimitation could hamper further development of space technology and the rational use of outer space. After years of discussion a consensus had still not emerged, but the lack of a recognized definition or delimitation had not impeded the development of space activities and of space law. Her delegation therefore believed that it would be realistic to drop the attempt to establish a legal delimitation between airspace and outer space.

24. Her delegation's understanding was that the draft questionnaire concerning aerospace objects contained in the informal paper submitted by the Chairman of the Working Group on agenda item 4 did not presuppose the necessity of agreeing on criteria of delimitation. Moreover, her delegation recognized that the implementation of space treaties, and notably of the 1972 Convention on International Liability for Damage Caused by Space Objects (Liability Convention), must not be affected. On that basis it was prepared to take part in discussions concerning the legal aspects of aerospace missions, including functional coordination between air traffic control systems and aerospace craft operations. The views of the International Civil Aviation Organization (ICAO) on the matter would be particularly relevant and should be known before the Legal Subcommittee took further steps on the issue.

25. On the question of the geostationary orbit, she reiterated the view that ITU was dealing successfully with the problem of equitable access for all countries, taking particularly into account the needs of developing countries. The thirty-fourth report of ITU, introduced at the previous meeting, demonstrated the importance of its activity in that respect. Her delegation believed that the Legal Subcommittee should not take any step that might interfere in the competence of ITU.

26. The problem of satellites in the geostationary orbit that became dysfunctional might be relevant to the work of the Legal Subcommittee, but since it related to the broader space debris issue the Subcommittee should not deal with the matter until it was placed on its agenda. Her delegation noted that extensive scientific research was being carried out on the subject and welcomed the work plan of the Scientific and Technical Subcommittee for the next three years.

27. **Mr. LOUET** (France), referring to the question of the definition and delimitation of outer space, said that there had long been two conflicting approaches to the question of the legal framework for space activities.

28. His delegation did not endorse the direct approach of a division into airspace under State sovereignty and outer space governed by the principle of freedom of exploitation and use. That approach, though simple and attractive, had two drawbacks: the exact line of separation between air space and outer space would involve endless controversy; and such a division would be incompatible with the nature of space activities, which required pragmatism.

29. He therefore agreed with the United Kingdom representative that the indirect or functional approach was much to be preferred. That would enable space law to be established as a function of the activities it governed. His delegation had always maintained the view that space law should regulate space activities wherever they took place. Rather than applying in a particular zone, space law should govern certain specific activities.

30. In his delegation's view, great care should be exercised in dealing with the question of the character and utilization of the geostationary orbit, particularly in view of the words "without prejudice to the role of the International Telecommunication Union" in General Assembly resolution 49/34 (operative paragraph 4 (b)).

31. Account must be taken of the legal framework established by the 1967 Outer Space Treaty, article II of which precluded claims of national sovereignty in outer space. That provision was incompatible with any implicit or explicit claim of national sovereignty, which was why France and other countries had entered a reservation to the 1982 International Telecommunication Convention. France would not countenance any claim to the exercise of preferential rights over the geostationary orbit.

32. Because access to the geostationary orbit and the allotment of radio-frequencies were closely linked, ITU had been given responsibility for the overall management of space telecommunications. In his view, the ITU regulations already provided for satisfactory use of the geostationary orbit. Through the allotting to each member State of a predetermined orbit arc and a fraction of the frequency spectrum, the interests of the countries that already occupied the geostationary orbit and those that did not were adequately reconciled.

33. **Mr. PODCHERNYAEV** (Russian Federation) said that some members of the Subcommittee approached the creation of a legal regime for space objects as something that could not be dealt with productively, since it required a more speculative than realistic approach. His delegation felt that the Subcommittee's task was to create a common denominator out of a variety of interpretations. The draft questionnaire concerning aerospace objects, though some editorial improvements could be made to it, basically already had the necessary consistency, focus and clarity.

34. A number of countries were developing new types of transport based on aerospace devices capable of flying in both airspace and outer space. There were presently three technical designs for the construction of such systems. The first was the multiple-use rocket system with vertical launch capability and vertical or horizontal landing of the orbital stage. The second design was for a multiple-use aerospace system with capability for airborne launch of the orbital stage from external suspension on the launch vehicle. The third design was for multiple-use aerospace systems relying on genuinely multiple-use aerospace vehicles with horizontal launch and landing capabilities. Such systems generally had an engine unit which comprised both

the rocket and the aerojet propulsion devices that formed the thrust system for supersonic aircraft, and which drove the orbital stage into the atmosphere at supersonic speeds. The degree to which the various designs could be realized in practice varied widely. A multiple-use aerospace system with an aircraft-style mechanism for takeoff and landing would be unlikely to be built sooner than would a multiple-use rocket system, for which the technology was already available.

35. The fundamental differences between the aerospace and rocket systems explained the need to use fundamentally new technology in implementing the designs and to carry out extensive research in a number of fields (supersonic aerodynamics, construction of propulsion systems, materials testing, thermodynamics, etc.).

36. The features and characteristics of such systems did not limit their use exclusively to transport in the Earth-Orbit-Earth cycle: they were capable of performing a variety of functions both in space and from space to Earth. In the light of the likely growth in payload transport between Earth and space, the creation of such systems would appear to be a viable option.

37. The technical capabilities and possible applications of aerospace objects raised the question of whether additional procedures must be established for them. The norms to be applied must be chosen using a number of criteria, first among which was the application for which the device was to be used: delivery of payloads or passengers from one spot on Earth to another, or emplacement of objects in space. It would be logical to suppose that existing regimes for airspace and outer space would be supplemented by the necessary agreements, taking into account the specific features of the new means of transport.

38. Among the biggest issues involved was ensuring a State's sovereignty over its airspace, since aerospace objects could, in the course of their passage into space and return to Earth, remain in airspace for extended periods and cross the territory of other countries. It was also important to ensure the security of space transport and of the aerospace objects themselves, since they were more difficult to manoeuvre and guide in flight; finally, it was important to limit the military applications of aerospace objects, which would be able to perform a broad range of military tasks with a significantly new level of competence. Concerning the question of State sovereignty over airspace, he noted that Earth-Earth aerospace objects must be defined as air vehicles and their use must therefore be regulated by the 1944 Chicago Convention on Civil Aviation and by other instruments of international air law.

39. But the situation with Earth-orbit aerospace devices was by no means so straightforward. Such devices must be defined as space objects, and the regulations for their use must be governed by the 1967 Outer Space Treaty and by the other instruments of international space law. When such devices were in the airspace of foreign countries, two principles must be kept in mind: freedom of use of outer space and sovereignty of States over their airspace. Should the principle of freedom of use of outer space be construed as leading automatically to the principle of access to outer space? In other words, might States which utilized aerospace objects claim the right of unobstructed passage through the airspace of other States? The interests and security of such States, including ecological security, could be directly affected by such an interpretation.

40. Some held that it would be useful to develop legislation on the right to innocent passage of aerospace objects through airspace. The right to innocent passage would not affect the extension of State sovereignty to the airspace above the State's territory and would apply only for a strictly defined purpose - launching into orbit and return to the Earth. Innocent passage could be defined as flight that did not violate the peace, law and order and security of the underlying State.

41. The question then arose as to whether the right to innocent passage should become a customary norm of international law, or should be set out in bilateral or multilateral agreements. It was probably the practice of States that would determine the response to that question. His country's law on space activities included the following provisions: "Space objects shall be manoeuvred in the airspace of the Russian Federation with due regard for the requirements set out in legislation on the use of the airspace of the Russian Federation" and "A space object of a foreign State may carry out a single innocent passage through the airspace of the Russian Federation for the purpose of its launching into Earth orbit or outer space, or for the purpose of its return to Earth, provided that the corresponding services of the Russian Federation have been duly informed of the time, place, trajectory and other conditions of such passage".

42. The issue of delimitation of outer space remained unresolved, but international application of the right to innocent passage would be a step in the right direction. It was only necessary to decide on the altitude up to which the regime could apply. His delegation hoped to hear the views of others on that point.

43. **Mr. SUAREZ** (Mexico) considered that document A/AC.105/C.2/L.192 of 30 March 1993, submitted by Colombia (see document A/AC.105/573, annex IV, section A), was still relevant because it formulated ways of ensuring the rational and equitable use of the geostationary orbit without ignoring the role of ITU. His delegation believed that the problems of using the geostationary orbit could only be solved in a global perspective, taking account of the interests of States with advanced space capabilities as well as those of the developing countries.

44. His delegation endorsed the arguments that the geostationary orbit was a limited natural resource, with a risk of saturation by space objects and debris, and believed that there was a need for a legal regime to guarantee its rational and equitable use. It agreed that the geostationary orbit was not subject to national appropriation by claim of sovereignty.

45. In his delegation's view, the question of the geostationary orbit was closely linked with that of space debris, and he therefore proposed that a study of that matter from a legal standpoint should be embarked upon as soon as possible.

46. Document A/AC.105/C.2/L.189 on questions concerning the legal regime for aerospace objects, submitted by the Russian Federation, might provide the right approach for the Subcommittee's work. The Russian proposal had been at the origin of the idea of a draft questionnaire on aerospace objects, a valuable source of information which would make it possible to establish the necessary legal framework. In that connection he welcomed the work of the Working Group on agenda item 4.

47. Technological progress was bringing with it new issues that needed careful consideration by States. The question of reusable space objects and objects capable of orbiting the Earth and returning to Earth through air space involved the question of the duties and responsibilities of the State launching the object and the right of the countries over which the object passed, assuming that the airspace was considered to be part of its national territory. His delegation reiterated its support for an invitation to be issued to ICAO to consider those issues.

48. **Mr. HE Qizhi** (China) said that he had been surprised to hear it suggested at the present session that the issue of the geostationary orbit fell entirely within the competence of ITU and should disappear from the Subcommittee's agenda. He strongly disagreed. In General Assembly resolution 49/34 the Subcommittee had been mandated to continue consideration of the item.

49. It was generally recognized that the legal regime of the geostationary orbit differed from that of outer space, which was governed by the principle of free access laid down in the 1967 Outer Space Treaty. The geostationary orbit, however, was a limited natural resource and its legal regime should be governed by the principle of equitable and rational use.

50. While ITU dealt mainly with technical arrangements for the orbit, such as spectrum allocation and satellite positioning, the orbit's use had political and legal implications in addition. The technical arrangements therefore needed to be supplemented by general principles constituting a comprehensive legal regime for the orbit. An important non-technical issue which it would not be proper for ITU to deal with was the removal of space debris and spent satellites from outer space. That was obviously a matter for international space law and within the mandate of the Committee and the Subcommittee. A provision on the paramount necessity for removing that material from the geostationary orbit should be included in the legal regime to be formulated by the Subcommittee. Such a provision might usefully be added to the Colombian working paper on the item (A/AC.105/C.2/L.192).

51. Further consideration of the question of the geostationary orbit should take place in the Working Group. His delegation repeated its view that the roles of the Committee and ITU in regard to that matter were complementary, not contradictory, and that the Committee should seek any necessary advice from ITU on the subject.

52. **Mr. BARSEGOV** (Russian Federation) said that the clash of diametrically opposed viewpoints had been a feature of the discussion on use of the geostationary orbit for many years now - so much so that conflicting views seemed to be becoming the norm. Yet the lack of agreement and the fact that the discussion seemed to be going in circles constituted a blow to the Subcommittee's prestige. Would such a spirit of alienation and hostility ultimately prevail, or would the Subcommittee modify its approach? The purpose of its work, after all, was to make real progress in the quest for a balanced and rational solution. If it took a pragmatic approach, the Subcommittee could get down to considering the whole range of ideas set out in the working paper submitted by Colombia. He called on delegations to provide well-thought-out and constructive comments on that paper.

53. Turning to the geostationary orbit, he said that the work of ITU covered many aspects of the matter and was of great use to many countries. At its Plenipotentiary Conference in Kyoto, Japan, ITU had concentrated its work on improving access to the orbit. A study had been scheduled and was already under way; there was every reason to believe it would help to resolve a number of matters relating to technically appropriate use of the geostationary orbit.

54. Within the Subcommittee, the discussion of the geostationary orbit took on more complex dimensions than was the case in ITU. fortunately, a number of positions held earlier by developing countries had now been r[illegible]sed, giving a new basis for analysis and generating a number of theories more promising than the "equatorial" doctrine. The proposals were increasingly realistic, the relevant working paper was clearly phrased and its objectives were carefully outlined. If one looked at the paper closely, however, one could see certain structural faults.

55. While subparagraph 9 (a) appeared to create two sets of opposing categories - developed and developing countries, and countries that already had access and those that did not have access to the geostationary orbit - in reality the sole opposition was between developed and developing countries. Preference was thus being given in all cases to States in a single group. That situation was reinforced in

subparagraph (c), which indicated that any developing country could reserve a position or positions, on the grounds that "legitimate efforts" were being made to use them. The definition of such "legitimate efforts" needed to be fleshed out.

56. In one sense, subparagraph (b) contradicted the principles set out in subparagraph (a) for resolving a situation when there were equal claims from countries that had access and countries that did not have access. Subparagraph (d) offered additional elements for interpreting the principle of equity, but also raised the question of practical mechanisms for putting that principle into effect.

57. Whatever their final form, the provisions on the geostationary orbit had to be up to date, comprehensive and based on real experience with mutually advantageous cooperation. A viable document could be forged only with the agreement of all groups of countries.

58. **Mr. REY CORDOBA** (Colombia) said that the representative of China had made abundantly clear the fact that the Subcommittee had a duty to deal with the question of the geostationary orbit. That the matter was not the sole prerogative of ITU was amply demonstrated by General Assembly resolution 49/34 in paragraphs 4 (b), 6 and 13 (b) (ii). Thus it was not for the Subcommittee to decide whether it should continue its consideration of the matter; the Subcommittee had a duty to pursue the question unless and until the General Assembly decided otherwise. He therefore disagreed with the suggestions he had heard at the present session that the problems of the geostationary orbit should be left entirely to ITU.

59. He expressed satisfaction at the general tone of the discussion which had taken place on the item and the prospects which the statements made by Argentina, Chile, France, Indonesia, Mexico and the Russian Federation offered for constructive dialogue on the subject. His delegation's working paper (A/AC.105/C.2/L.192) implied that access to the geostationary orbit was inequitable. It was for the Working Group to test the truth of that proposition, with suitable assistance from ITU in the light of the provisions of its Constitution, including the provision in article 44 concerning the special needs of the developing countries and the geographical situation of particular countries.

*The meeting rose at 12.05 p.m.*